

Background and Commentary on The Report SPECIAL EDUCATION: RECOMMENDED FUNDING PROCEDURES

Funding for special education in New Brunswick began in the mid 1950's with grants from the Department of Education to sponsoring societies of auxiliary classes under the authority of the Auxiliary Classes Act. The grants were used to provide staff, programs and services for mentally handicapped children and youth. In the mid 1970's the Department initiated grants to school boards through the Comprehensive Plan to assist with the additional costs involved in providing staff, programs and services for students with learning problems.

Early in the 1980's the move to integrate handicapped students into the regular school system began to grow in New Brunswick. At the annual general meeting of the New Brunswick Chapter of the Canadian Association for the Mentally Retarded in May 1982 the Premier of the day pledged the government's support for the program of integration as part of the Decade of the Disabled.

Two dramatic events occurred in quick succession and identified the need for a more organized method of providing special education funds to school districts. In 1985 the Roberts Hospital School in Saint John West was closed and the students, educational staff, services and funds transferred to the Department of Education for placement in school districts. The resources were distributed on a needs/request basis.

In 1986, Bill 85 was passed by the provincial legislature which:

- 1) repealed the Auxiliary Classes Act
- 2) made school boards responsible for the education of all children resident within their jurisdictions
- 3) required that funding designated for special education be provided to school boards.

While the integration movement had begun in New Brunswick as early as the 1970's these two events, closing the Roberts Hospital School and the passage of Bill 85, accelerated the movement. As a result, the Department of Education recognized that a more structured approach to distributing special education funds had to be developed and applied. The principles of need and fairness had to be a factor. In January 1987 the Department made a working paper available on norms for funding special education. It was applied in the 1987-88 school year.

There was and continues to be general support for the working paper, with the exception of the 5 percent reference. There were concerns regarding additional needs expressed by several districts, but District 20 was particularly concerned because, while supporting in general the notion of a formula, the District maintained the formula did not provide for them adequate funding to enable them to maintain the same extent of paraprofessional support as they had had in place. District 20 argued they needed a higher funding level than other districts because they received a larger number of former Roberts Hospital students and they have a larger concentration of hard-to-serve children in their district. While sympathetic to the argument, it has been difficult for the Department to validate their claims in ways that would accommodate budget or funding arrangements.

In an attempt to resolve the funding issue with School District 20 the Department suggested a study to look at the situation and to assist in the development of a fair and justifiable basis on which to provide funds to all districts.

It was the Department's expectation that the study would:

- 1) determine the extent to which the District 20 special needs population differs from other districts,
- 2) recommend service levels, delivery mechanisms and funding implications for this district and others, and
- 3) recommend a funding model for the province.

The report describes the current situation in relation to these matters but does not describe in sufficient detail a model on which to base the distribution of funds.

The report states that District 20's population (therefore District 20's need) is, in fact, different from other districts but it goes on to say The exceptional needs of pupils vary: the educational needs of school districts vary: the organizational responses of each district should vary (page 26). In fact, each district is different from each other and that is to be expected. The report, however, does not identify these differences in ways that can be quantified for District 20 or any other district.

The report recognizes that all districts, except District 20, are pleased with the new funding formula (District 20 agrees with and supports the concept - it just does not generate enough money). It also states that a satisfactory formula can be developed but it must be based on weighting factors. These weighting factors were not identified but would be derived from context equity. The concept of context equity is not necessarily a useful one in New Brunswick where all funds are provided centrally. Expectations of services and programs do not differ in a province based on "equal opportunity" and where costs generally do not differ significantly from one district to another. For example, it should not cost more to provide the services of a teacher's aide in Saint John than it does in Chatham or in Port Elgin.

The report describes problems of "definition" and "identification" stating that "there is little, if any, agreement among the "experts." There are indications that there is not a great deal of agreement among our school districts. These identification problems and problems with determining "weighting factors" may complicate New Brunswick's efforts to implement a fully-integrated, non-categorical model of staffing, programs and services.

Perhaps the greatest disappointment is the failure of the report to recognize some of the special circumstances that exist in New Brunswick. We are an equal-opportunity province - all parts of the province must be treated equally, therefore the statement at the bottom of page 11 Notwithstanding political assertions to the contrary, it is improbable that equal educational opportunities can be provided within the province of New Brunswick.....is disturbing. Our legislation requires that funding designated for special education be provided to school boards, therefore, the recommendation:
.....Funding for special education need not and should not be separately provided is not of much use.

At this time the original questions remain unanswered and even as the report states A more comprehensive understanding of New Brunswick's problem will enhance the possibility of creating a New Brunswick solution....(page 5) perhaps we must continue to delve deeper into our problem as we seek to determine the solution. We must still address the following questions:

- Are there needs that cannot be provided for in the current funding formula?
- If so, what are they?
- How can we provide for them?

Certain matters must be addressed immediately, however, in order for school districts to proceed with planning for next school year. This must be done within the context of provincial parameters in:

- aims and objectives
- programs
- staffing
- support services
- access
- transportation

**SPECIAL EDUCATION:
RECOMMENDED FUNDING PROCEDURES
THE FINAL REPORT**

FOR

**THE DEPARTMENT OF EDUCATION
PROVINCE OF NEW BRUNSWICK**

PREPARED BY

**T.R. POSNO, Ed.D.
JANUARY - 1988**

PREFACE

The recent legislative changes and revised funding formula for special education services and programs in New Brunswick have been significant and important steps in the evolution of educational practice. Those legislators and educators responsible for the changes must be commended for their foresight, courage, and commitment.

The important first steps have been taken. It now becomes the responsibility of teachers and district administrators to fulfill the promise of the opportunity which has been provided.

Any changes, and certainly initiatives of the magnitude undertaken by New Brunswick Education, present operational difficulties. This study has been commissioned to provide assistance with the implementation problems of new funding procedures.

In conducting this study, I have been asked to evaluate certain aspects of special education practice. My findings are analytical and may even appear to be critical. But they are not negative. They are merely indicators of practices which may be improved and must be considered within the perspective of my recommendations.

It has been my pleasure to meet many caring and concerned educators. Their knowledge, education and commitment to excellence have been noted and should be recognized. The teachers, administrators, and departmental authorities have accepted the challenge of change. Their direction and advice have been considered and appreciated. I feel enriched by this opportunity to assist them. I am certain that education in New Brunswick is also enriched by their endeavours.

Teachers, principals, and district administrators were most hospitable and helpful to me in the conduct of this study. Departmental staff were also kind and very solicitous in providing access to information and in ensuring the accuracy of my assessments. They are obviously dedicated to the educational directions upon which they have embarked. To them all, I offer my congratulations and heartfelt appreciation for their efforts.

Sincerely,

Ron Posno
05 January, 1988

Bratton Posno
Associates

TABLE OF CONTENTS

BACKGROUND	1
Rationale	1
Terms of Reference	2
Study Activities	3
FINDINGS	5
Judgments Of Adequacy	6
Judgments of Equity	9
Prevalence of Exceptional Learning Needs	13
Funding Special Education	17
Planning Special Education	18
Accountability	20
RECOMMENDATIONS	23
Basic Educational Assumptions	23
Individual Educational Planning	25
Adequacy and Equity	26
Classroom Loading Factors	30
Use of Shared Resources	31
Accountability	32
CONCLUSION	35
Implementation Considerations	35
APPENDICES	39
A - Summary of Findings	42
B - Summary of Recommendations	45
c - A Conceptual Format: Individual Performance Plan	46
D - Principles of Good Funding Formulae	47
E - Types of Special Education Formulae	48
F - Incentives and Disincentives of Special Education Formulae	

TABLE OF FIGURES

FIGURE 1:

Dimensions of Educational Equity	10
--	----

FIGURE 2:

Prevalence of Exceptional Learning Needs	14
--	----

TABLE OF REFERENCES

NEW BRUNSWICK SOURCES

Department of Education	49
-------------------------------	----

School District #19	49
---------------------------	----

School District #20	50
---------------------------	----

New Brunswick Teachers' Association	50
---	----

BIOLOGRAPHICAL SOURCES	50
------------------------------	----

SPECIAL EDUCATION: RECOMMENDED FUNDING PROCEDURES

BACKGROUND

The following rationale and terms of reference were provided by the Director of Student Services in a document entitled, "District 20 Special Education Study."

RATIONALE

Recent legislation introduced in the province of New Brunswick requires school boards to serve all children within the school district who qualify by age and residency. This zero-rejection policy, plus the recent closure of a residential institution designed to serve the needs of severely and/or multiply handicapped children, places all children, regardless of the degree of their exceptionality, within the public school system. The same legislation requires the Department of Education to provide to school districts, funding designated for the provision of programs and services to exceptional students.

The Department of Education, in an attempt to ensure equity and fairness in the allocation of resources across the province and at the same time enable school districts to plan with greater certainty for the long term delivery of programs and services in keeping with the spirit and intent of the legislation, introduced a special education funding formula for all districts.

School District 20 claims that the new funding for special education does not permit them to employ an adequate number of paraprofessionals for the 1987-88 school year. They argue that a higher funding level is necessary for District 20 because:

- a) a larger number of students from the W.F. Roberts Hospital School entered District 20, and
- b) there is a greater concentration of hard-to-serve populations in District 20.

The Minister of Education has authorized a competent and independent assessment of:

- a) the special education needs (identify and quantify) of District 20,
- b) the extent to which these differ from other districts, and
- c) the usefulness of the existing funding model to meet the needs of the district.

TERMS OF REFERENCE

- Review New Brunswick special education legislation, provincial policies and programs.
- Review current New Brunswick special education funding policy.
- Determine the special needs population in School District 20.
- Compare this population to the special needs population in other school districts (e.g., 19,15,10) to determine the extent to which it differs from, or is similar to, other districts.
- Recommend reasonable service levels and delivery mechanisms for that population.
- Suggest ways these services can be provided.
- Indicate the funding implications of the above.
- Recommend a funding model which will enable the Department of Education and school districts to provide adequate programs and services for the special needs population.

Note: During a meeting with the Deputy Minister and the Assistant Deputy Minister on Nov. 16, it was determined that "recommending a funding model" was most important and that this particular aspect should be emphasized in the report. They also requested the inclusion of specific recommendations with respect to "accountability."

STUDY ACTIVITIES

During the period October 20-23, the consultant was met and conducted on a visitational tour to School Districts 10, 15, 19, and 20. During this tour, the consultant met with district administrative staff to discuss responses to the following questions.

- Is the new funding formula more supportive or helpful in providing special education programs and services? Why?
- What problems or concerns do you have about the new funding formula? What recommendations do you have?
- How did you use the new funding formula in developing your three-five year plan?
- Do you anticipate any future problems in the funding formula with your planning?

After discussion, an opportunity was provided for the consultant to visit school sites and classrooms to observe how special education programming was being provided.

On November 16 and 17, the consultant met with Departmental staff, including the Deputy Minister and the Assistant Deputy Minister, to share observations and to obtain further direction. Opportunity was also provided to meet privately with the Executive Director of the New Brunswick Teachers' Association (NBTA).

Prior to and during these meetings, many documents were provided to the consultant for consideration. Apart from personal notes and copies of personalized correspondence, all titled documents are listed separately in the Table of References accompanying this report.

Due to the major requirement to study and recommend an appropriate funding formula, the consultant undertook an extensive review of the literature. Both

the "findings" and "recommendations" sections of this report include references to similar undertakings in other parts of Canada and the United States.

Because educational services for the aurally and visually handicapped, available through the resources of the Atlantic Special Education Authority, are subject to a separate study currently being undertaken, all observations and recommendations regarding same have been excluded from this report.

NOTE: On December 04, a preliminary report was submitted to the Department of Education. On January 04, 1988, the consultant met with the Deputy Minister, the Assistant Deputy Minister, and the Director of Student Services to review the findings and recommendations of the preliminary report. This final submission reflects the issues discussed during that meeting and represents the totality of the entire study.

FINDINGS

New Brunswick Education (Student Services) is experiencing the turbulence of transition. These findings and the recommendations of this report must be considered within the context of all that is happening -- not solely on the basis of one funding problem with District #20.

In April, 1987, the Schools Act was amended, resulting in significant changes to the provision of special education throughout the province. Major changes to funding practices were introduced for the 1987-88 academic year. Amidst all these changes, the entire system, (departmental authorities, district administrators, principals, and teachers) is also wrestling with changes of organizational style. In many ways, the entire province has been operating in a style characteristic of a high school of the 1960s while attempting to implement a "management for results" philosophy of the 1980s.

The findings of this report reflect all these change factors. Each finding must be considered in terms of more than the presenting problem. Each finding represents symptoms of all that is happening within the system.

The problems of New Brunswick are not unique: they are similar to the problems and issues being addressed in most states and provinces in North America. Rarely though, has any state or province attempted to do so much in such a short period of time. Such initiatives are commendable, even laudatory, but such an undertaking adds problems of timing and preparation.

The findings of this study are specific to New Brunswick, but they have all been couched in descriptions of what is happening elsewhere. A more comprehensive understanding of New Brunswick's problem will enhance the possibility of creating a New Brunswick solution.

JUDGMENTS OF ADEQUACY

Since the advent of public education, the concept of adequacy has been an imprecise, dynamic, and questionable standard determined by political balancing of societal beliefs and availability of resources. The prevailing standards of adequacy of twenty-five years ago would not be considered acceptable today. Responsibilities have been added and gradually broadened in scope. Professional support groups and parent lobby groups are attempting to obtain protective legislation or regulation which would ensure equal opportunity or educational equity for students with exceptional needs. Educational decision makers, lacking empirical data, are mostly dependent upon the qualitative and subjective judgment of politicians in establishing policy. Thus, the resulting standards of educational adequacy, in the broadest sense, will be constantly in flux.

A definition of adequacy, in the context of special education, means a provision of resources sufficient to meet specified goals for all those who have exceptional needs.

FINDINGS

1. Mainstreaming special education, legislating a "zero-rejection" policy, repealing the Auxiliary Classes Act, and closing specialized treatment facilities such as the W.F. Roberts Hospital School will result in more than changes of educational practice. Educational costs will likely increase, if the qualities of education possible in segregated placements, are to be maintained.
2. While overall, provincial funding allocations were increased, there was no initial attempt to provide differential allocations to school districts to allow for a disproportionate prevalence of educational needs.
3. Most districts received more funds (staff allocations) for the 1987-88 academic year than for previous years. District #20 initially received fewer staff allocations, but coincident with approving this study, the Department subsequently provided District #20 with an additional \$200,000 (approximately) as an adjustment factor. Due to higher costs,

District #19 has also received an additional \$100,000 (approximately) and Districts #10 & 15 have received \$25,000 (approximately).

Undoubtedly, District #20 received a disproportionate number of "hard-to-serve" pupils as a consequence of the closure of W.F. Roberts Hospital School. In spite of this, the initial allocation for teacher aides/attendants was reduced by forty-two percent in the first year of formula change. The number of teachers was also reduced by a full time equivalent of 1.4 teachers. Even without the W.F. Roberts issue, District #20 would have been hard-pressed to conform to such a significant reduction in the number of aides -- particularly when final, official confirmation of the funding changes was not distributed until April 28. Problems with contracts, realignments of resources, continuity and the consistency of program, were all major issues which District #20 had to address.

The Department attempted to provide school districts with information before April 28. In January, the Assistant Deputy Minister advised all superintendents of a variety of proposed formulae being considered, but warned that no decisions had yet been made as to, "if, when, or how." In any case, if all the proposals of January were implemented, District #20 would not have experienced a funding shortfall, so no concern nor caution was advanced by District #20 to Departmental officials. At least twice more, during subsequent meetings, the funding formula was discussed in conceptual terms, but final determinations of actual numbers of staff to be funded were not distributed until April 28.

Adequacy or sufficiency of resources cannot be assessed or judged in the absence of specific program goals and objectives. Even if I.E.P.s (or some derivative) were readily available, a comprehensive review could not be conducted during a single day's visitation to a school district. However, on the basis of limited observations, the following should also be considered in terms of adequacy.

Please note that reference to "all districts" means only Districts #10, 15, 19, & 20. There was no systematic attempt to obtain data from the other districts. The four districts reviewed by the consultant were

selected by the Department as representative of the needs throughout the province.

FINDINGS

4. While possibly available, no school district, other than District #20, provided or made reference to program goals or Individual Education Plans (I.E.P.s), or any derivative of same, to the consultant during discussions of adequacy of funding. Programs tended to be described in terms of placement or according to traditional categorical labels.
5. All districts and particularly District #20 reported problems with teacher aides and personal attendants. There were not enough and either union or New Brunswick Teachers' Federation policies limited their potential use in classrooms.
6. All districts reported serious historical and current service shortages in terms of psychiatric, speech pathology, physiotherapy, and occupational therapy. Of the few cases receiving support, only annual assessment reviews were provided.

The provision of teacher aides is a major issue. Costs have risen substantially. One official reported an increase from \$600,000 in 1981 to \$3,000,000 in 1987. Some pupils require aide support some of the time, but rarely does a pupil need an aide all of the time. Providing an aide, in itself, does not constitute adequate special education and mainstreaming may have exacerbated the problem. One assistant superintendent flatly stated, "Teachers and principals need an incentive in accepting a child (with severe needs). An aide is often just the ticket to get the pupil into the classroom." Some aides are perceived to be "keepers," others are "guards," and all those observed by the consultant were caring, committed people trying very hard to provide something meaningful for their charges -- frequently without program plans and often without specific direction from the teacher.

School problems in obtaining specialized resources should not have been unanticipated. It takes time and leadership to change delivery of such services from centralized facilities to community-based programs. Many states and

provinces are trying similar models of resource sharing and all are experiencing difficulty with making it work at the front-end of the delivery system. There are problems with contractual hours, continuity of staff assignment, responsibility and accountability to two or more masters, and a host of other operational problems.

Operational issues must be dealt with, but the major issue is one of program integrity. It is difficult for many of these specialized staff to understand and appreciate the programmatic aspect of education when they have been trained and remain employed within a culture of health care and social services. Teachers require more than infrequent assessments. They require direct assistance with the severe and unusual exceptional needs of some children.

In summary, it can be said that without specific education goals and objectives, no judgment of adequacy can be determined. Simply adding aides or adding more to previously existing special education services will not solve the problems facing the educational leaders today. Society has changed and they have rightly changed educational policies. They also need to change funding and educational practices.

JUDGMENTS OF EQUITY

Judgments of adequacy are frequently confused with judgments of equity. They are different. Adequacy is an assessment of sufficiency. Equity is an assessment of fairness.

In discussing a resource allocation and evaluation model for services for multi-handicapped persons, James Lederer (1981, p. 03) suggests that:

Equity refers to the social fairness, the impartiality, or the equality of opportunity for equivalent services. If equity is defined as equal

satisfaction of service needs...resources should be allocated to each individual based upon his/her professionally determined needs.

Equity should not be confused with equality. Special education, by its very nature requires unequal treatments. Equal treatment of unequals does not create equality nor equity.

Possibly dimensions of educational equity can be best considered as "program equity" and "context equity" as outlined in FIGURE 1¹.

FIGURE 1: DIMENSIONS OF EDUCATIONAL EQUITY



Program equity refers to degree and kind of educational opportunity in terms of available programs, and context equity refers to dimensions of a school's district ability to provide. While inter-related, they must be considered separately in

¹Adapted from Stephen B. Lawton's Distinction of Vertical and Horizontal Equities in "Ontario's Approach: Paying School Board's to Save" in "The Cost of Controlling The Cost of Education in Canada"...proceedings of a symposium on Educational Finance in Canada at the 1983 meeting of the American Education Research Association.

order to make judgments as to what is equitable (Harrold, 1982; Chambers, 1980; and Atherton and Armstrong, 1975). School districts will vary in the terms and extent of their program and context equities. The use of six levels of educational opportunities in this figure is entirely arbitrary. A school district could have any number of opportunities -- each defined by program expectations, nature of program, and resource utilization. Variance of program opportunities from one district to another is mostly due to differences of parental expectations and educational needs.

Context equity refers to district differences in ability to provide or support a variety of educational programs. To a large extent, the effects of context equity within New Brunswick will be reduced because education is totally funded by the Department of Education. However, the effects of population density and levels of available employment will have considerable influence in the determination of equity.

FINDINGS

7. A recent philosophy statement and staffing model, provided by the Department of Education in January, 1987, outlines nine possible levels of educational opportunities. However, description of each level is limited to placement. It does not include program expectations, nature of program, and resource requirements. In addition to these program equity omissions, the consultant was not apprised of any consideration or use of context equity in the Department's funding formula.

It does not matter how many levels of service or program are devised by the Department. It does matter that the levels specify program expectations and basic resource requirements which could be used at the district level of jurisdiction.

Notwithstanding political assertions to the contrary, it is improbable that equal educational opportunities can be provided within the province of New Brunswick. Pupils with exceptional needs in remote, rural districts are not likely

to have access to the same educational opportunities as children with similar exceptional needs in cities such as Moncton, Saint John, and Fredericton. Even though all school districts in a province have the same educational policies and regulations, the provision of equal opportunity is really the provision of program equity -- that which is judged fair and acceptable by the district community. Complete and equal funding by the Department may remove most concerns about what a district may afford, but educational equity is not a constant standard. It is a relative index of community opinion largely based upon differing educational expectations.

FINDINGS

8. **Funding of special education programs and services is equally distributed throughout the province, proportionate to district enrolments. The amounts of funding follow provincially recommended staffing models.**

Equal grants, proportionate to district enrolments is described in the literature as "flat-grant" or "block-funding." Block-funding of special education is typically based upon three questionable assumptions:

- a) the prevalence of exceptional needs is common through the province;
- b) the resource prices in providing special education programs and services are common throughout the province; and
- c) the ability of school jurisdictions to provide special education programs and services is common throughout the province.

In New Brunswick, the greatest concern relates to the prevalence of exceptional needs. The least concern is that of differing resource prices. (Availability of resources may be problematic, but prices are relatively standard throughout the province.) The ability of jurisdictions to provide programs will vary, requiring uncommon solutions to fit nonstandard problems of context.

In *Education Finance in Canada* (1981, p.346), Wilfred J. Brown suggests that,

A flat-grant model by which [provincial] funds are apportioned on the basis on a flat amount per pupil unit or other unit, which does not take into consideration necessary variations and unit costs or variations in wealth per unit of need of local districts provides, *the least financial equalization for given amount of provincial aid of any of the support models tested.*

In summary, it can be said that without compensation or adjustment for all aspects of educational equity, the provisions of special education programs and services in New Brunswick will not be equitable.

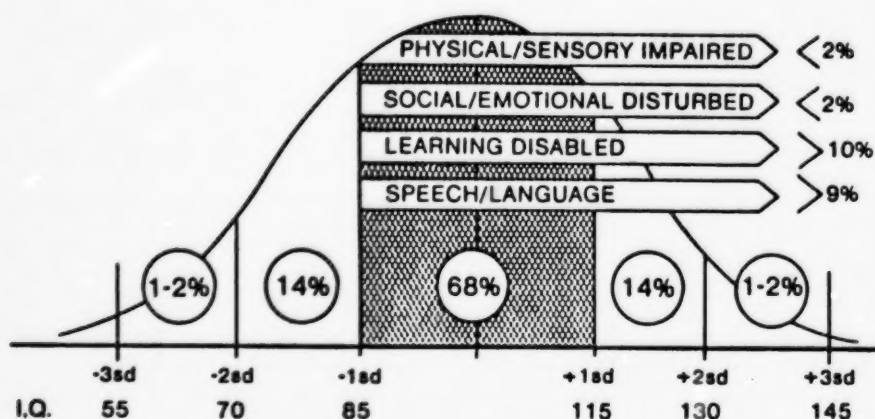
PREVALENCE OF EXCEPTIONAL LEARNING NEEDS

There is much confusion about how many pupils may have exceptional learning needs. Special education professionals frequently use quasi-medical /psychological jargon, clumsy definitions and inadequate assessment procedures. Educational administrators are perplexed with estimates ranging anywhere from 5% to as much as 80% of the population (Rubin and Balow, 1971). Reliable and valid data on prevalence rates of exceptionalities on the general population are lacking (Kakalik, 1978; Brewer and Kakalik, 1978; Craig, 1976; Craig and McEchron, 1975; Fleischmann, 1972; Rossmiller, 1970). Reynolds and Birch (1982, p.42) suggest:

...that even though many special educators consider themselves responsible for ten to twelve per cent of all children...modern, dynamic educational planning precludes any possibility of thinking in terms of a static set of children at the ten to twelve percent level distributed among subsets by traditional categorical labels.

In Canada, at least one province has attempted to provide some perspective on the morass of conflicting opinion. In a recent position paper on special education funding, the *Conference of Alberta School Superintendents* (CASS²), suggested that the expectations of exceptional needs could be summarized and outlined as follows in FIGURE 2.

FIGURE 2: EXPECTATIONS OF EXCEPTIONAL NEEDS



The authors of this paper suggest:

...That normal or typical children may be those assessed as between minus one and plus one standard deviations of the mean. All others and those categorical exceptions as noted, should be considered as having atypical needs and presumably requiring some kind of special education intervention during their school careers.

...That prevalence must be interpreted with some discretion: the need for special education programs and services cannot be simply based upon the sum total. There is considerable overlap i.e., a

²The Conference of Alberta School Superintendents (CASS) is a professional organization of school superintendents employed by the various school jurisdictions in the province of Alberta.

student with a severe learning disability may also have a severe behavioural disorder. However, it can be seen from this figure that the prevalence of exceptional need is substantial and constitutes, for most jurisdictions, something in excess of 30% (likely closer to 40%) of the overall enrolment.

Prevalence factors in FIGURE 2 were derived from information provided by the United States Office of Education, The United States of Health, Education and Welfare, and data provided by school boards in the province of Ontario.

While not definitive, FIGURE 2 does at least, suggest that the prevalence of exceptional learning needs is substantial (30-40 % of the total population). Its greatest danger is its oversimplification of description. It does not define exceptional needs nor does it suggest how such needs are to be identified. It does not account for regional variance nor differences between urban and rural jurisdictions, and it is subject to gross error due to anomalies of social planning such as special facilities for the retarded, emotionally disturbed and delinquent subpopulations. In all, it must be understood that there is little professional agreement as to the extent of need and that the prevalence of exceptionality can vary significantly from one jurisdiction to another.

FINDINGS

9. District school administrators believe that provincial funding was based upon an equally distributed five percent prevalence factor. District #15 reported a disproportionately high prevalence of severe behavioural needs due to a large number of group homes recently developed within the district. District #20 has reported, in a variety of documents over the past few years, a disproportionately higher prevalence of severe retardation, severe physical and health handicaps, severe learning disabilities, multi-handicapped and severe behavioural and social problems.

There is much research that supports the claims of both districts. Large, urban areas seemingly attract families with severe problems because services are available and can be provided. Wide variances of socio-economic levels in urban environments create additional behavioural and social problems. The

extent and nature of needs will vary considerably from jurisdiction to jurisdiction depending upon density of population, economic levels, and availability of family support facilities.

FINDINGS

- 10. In spite of recent changes of Departmental philosophy, all observed records and reports by school districts, identified and described children in terms of traditional categories of need.**

Definitions of exceptionality change from one educational jurisdiction to another. Nearly all definitions of exception children are non-specific in that they permit a great deal of latitude on the part of local jurisdictions as to those who may be considered to be exceptional children. Because the interpretations of definitions are not necessarily comparable across jurisdictions a child might be "exceptional" if s/he lived in one location, but "normal" if s/he lived elsewhere. Or, the child might be categorized as having one type of exceptionality in one location and another type in another location.

In addition to locational differences, J. Kakalik (1978), and S. Rawlyk (1977) suggest that students are more likely to be identified and assigned to programs which receive the greater grants. Conversely, as costs increase (with no offsetting revenues) students are more apt to be redefined and reassigned to less costly programs.

Another factor affecting interpretation of definition appears to be that of parental preference. Throughout Canada and the United States the prevalence of educable mentally retarded pupils has decreased proportionately to a marked increase in the number of learning disabled children -- a decidedly preferred description for most parents.

In addition to definitional problems, there are identification problems. There is little, if any, agreement among the "experts." Procedures for identification vary

from one school jurisdiction to another and few, if any, reliable instruments have been developed. Identification of exceptional learning needs is really a process of rating which uses a measurement continuum which varies from highly objective assessments, such as identification of visual impairment, to progressively more subjective assessments, as in the case of emotionally disturbed or learning disabled.

Teachers as well as educational administrators need to know, with a fair degree of exactitude, the precise nature and extent of educational learning needs. Unfortunately much of the existing information is based upon non-functional definitions and unreliable diagnostic procedures. Traditional categories, such as those currently used in New Brunswick, are not closely related to program or service needs. Simply knowing that someone has been categorized mentally retarded, or learning disabled, tells very little about what type of programming is required. Review of current literature indicate that teachers, policy analysts, and planners are questioning the use of such non-functional definitions and advocating, instead, the more practical use of program-based descriptors (Reynolds, 1982, 1977; Hartman, 1981; Bernstein, 1976, 1974; Smith & Neisworth, 1975). Describing special education in terms of needs and resource requirements, (program-based description), and avoiding the argot of definitions and the categorization of pupils, will be more effective in providing and funding special education.

FUNDING SPECIAL EDUCATION

A review of special education funding practices and costs across Canada (Kelly, 1985; pp.19-21) revealed that:

- funding practices varied widely;
- there was little agreement as to the constituents of special education costs;

- grant formulae were based upon past practice; were overly generalized; and bore little resemblance to actual expenditures and requirements at the local level.

William T. Hartman (1981, p.34) -- a leading North American authority on school finance stated:

Future cost estimates of special education must take into account the expected changes in programs, and practices caused by recent legislative and judicial actions, implementation efforts of school districts, and advances in curriculum and educational technology. *An extrapolation of the past is an inadequate means of predicting the future for special education.*

Special education is changing or expected to change. Certainly, the recent amendment to the Schools Act will produce significant changes in district organization and classroom methodology. Ideally, in addition to being adequate and equitable, special education funding formulae should be flexible enough to accommodate jurisdictional differences, and sufficiently proactive to be able to anticipate and induce desirable changes.

FINDINGS

11. All districts, except District #20, are pleased with the new funding formula. District #20 agrees with and is supportive of the concept of the new funding formula; its only concern is that of adequacy. No district wishes to revert to the former "cap-in-hand" approach and the patronizing manner in which funds were previously allocated.
12. The current funding formula is ostensibly a flat-grant which is overly generalized and is not necessarily related to actual expenditures and requirements at the local level.
13. School districts find it difficult to provide data on the cost of special education programs since accounting procedures tend to provide line-item costs rather than programmatic costs.

New Brunswick is not alone with these funding allocation and accounting problems. Education accounting models are just now evolving; in most cases, school systems have been and are currently using variations of business accounting models. Educators have simply not been effective in communicating their accounting needs to accountants. Most balance sheets are typically expressed in administrative terms unrelated to program utilization and have systematically neglected to review specific program expenditures (Anderson & Fleming, 1984; Brackett, Chambers & Parrish, 1983; Hartman, 1981; Chambers, 1978; and Bernstein, 1976). In those few instances when cost analyses of existing programs have been carried out, wide variations in expenditures per pupil have been noted both with different programs within a single district and amongst districts of similar programs. The more complex disabilities, generally requiring more expensive programs, tend to show the greatest variation in cost. With such commentary, is it any wonder that educational finance is most often considered, "an arcane art practised in the nether regions of bureaucracy" (Anderson & Fleming, 1984, p.13)?

PLANNING SPECIAL EDUCATION

The Schools Act requires school districts to prepare and submit an annual budget in a form and manner prescribed by the Minister. Before funds under the new formula would be released, District Superintendents were advised by Departmental memo on April 13, 1987, to provide:

- 1) a statement outlining plans for expenditure of the funds according to provincial programs,
- 2) a district plan to deal with emergent and/or unexpected needs, and
- 3) a brief statement regarding district plans for integration of special needs children in 1987-88. This should also include reference to district integration of plans for the next three to five years.

FINDINGS

14. All four Boards submitted annual budgets. However, only District #20 provided a copy of its five year plan to the consultant.

Since planning is an obvious Departmental priority, the consultant attempted to provide opportunity for school districts to refer to their plans. Direct request of one district to produce its plan resulted in an embarrassing admission that it had not yet been prepared nor were they certain as to how to develop a plan. Possibly other school boards generated a five-year plan, but in spite of a request to discuss planning, no other board referred to its plan in any manner other than to describe some wishes or problems they hoped to solve sometime in the near or distant future. District #20 had a plan. They produced it without request, and in discussion, frequently referred to its plans for meeting Departmental and local jurisdictional objectives. For example, with respect to integration, 98.7% of their total population will be receiving education in integrated settings in 1987-88. Of the 1,386 students receiving special education services, 1,181 pupils (85%) will be integrated for more than fifty per cent of their total instructional time.

Planning is important and educational finance authorities have been wrestling with the problem for some years. Various models such as the Planning, Programming, and Budgeting System (PPBS) and the Zero-Based Budgeting System (ZBBS) have been tried and discarded for a variety of reasons. The latest and most exciting model being discussed in educational finance circles is the Resource Cost Model (RCM). Its premier advocates in the United States are Hartman, 1981 & 1985; Brackett, Chambers & Parrish, 1983. In Canada, one researcher (Posno, 1986) developed an operational Resource Cost Model which would appear to have considerable promise in resolving school finance accounting and planning requirements.

A RCM was originally designed as an "ingredients approach to costing out education programs." In establishing a RCM a set of education programs for different educational levels is first established by a Program Category Committee. Secondly, the resource quantities for each of these programs is determined and assigned; and third, the costing out of these resources to determine program costs takes place. Exponents claim that the RCM concept was designed by educators specifically for use within education in order to bring rational decision making into budgeting and planning. Its possibilities might be considered by Education New Brunswick in order to provide a planning structure for school districts.

ACCOUNTABILITY

Unfortunately, the request to provide recommendations regarding accountability was not included in the original terms-of-reference. However, a few findings and general remarks can be noted.

FINDINGS

15. Without I.E.P.s noting objectives, there can be no accountability in special education.

In education, the only accountability that really matters is that a pupil benefits from the instructional process. Specific objectives are the only means currently available which can be assessed in some quantitative and qualitative manner. Otherwise, educators must resort to case examples, subjective opinion, and wishful thinking.

Additional accountability systems of other factors can be developed but only in terms of how these factors may support classroom enterprise. No one should dispute the need for a proper accounting of expenditures or those other kinds of accounting which support the employment of staff, but these are entirely and truly administrative in function and purpose. They only support the educational enterprise; they should not detract from nor control it.

FINDINGS

- 16. School districts are no longer required to submit lists of all pupils with exceptional needs. However, many districts have continued to prepare and submit similar lists which include description of the pupils' educational needs in traditional terms.**
- 17. School districts are required to submit lists of all persons by name, function, and annual salary, who are employed to supervise, to teach, or to attend to the exceptional needs of pupils.**

Both lists are possible examples of intrusive, questionable accountability measures. Their use gives rise to the following issues:

- What educational purpose do they serve? Do they improve classroom instruction?
- Who must take time to prepare them? Who must take time to read and to consider them? What other more direct support could these people provide if they weren't preparing and reviewing such reports?
- What educational decisions are being made on the basis of such information?

- Are they legal? With respect to pupil data, some daring individual might challenge in the courts the legislative authority to routinely collect such information.

The requested information is all redundant. Classroom teachers should know the exceptional needs of their pupils, and in spite of the lack of I.E.P.s, some written record of these needs should exist in the cumulative files.

School districts are required by other law and regulation to maintain employment records of all personnel.

Teachers and school districts require their respective kinds of information for operational decisions, but does the Department need it? Possibly the Department is asking the wrong questions. Better reports would not feature operational data, but would emphasize the educational results of school based decision-makers.

The transition from a paternalistic, hierarchial organization style to "management for results" is difficult. More control or authority and resources to make decisions must move to district levels. Different, more effective measures of educational accountability must evolve and be developed.

• • • • •

The changes in New Brunswick Education are profound. Teachers, principals, and administrators are willing and attempting to implement the new policies with verve and anticipation. Marvellous things are happening in classrooms. Pupils, lacking previous success, are now growing and learning in ways which will benefit themselves and the entire society of New Brunswick.

There are problems and worries, but the care and commitment of staff everywhere are obvious. The problems are primarily manifestations of their commitment. If they didn't care, there would be no worries, and because they care so much, they will develop exciting and practical solutions for the needs which have been identified in this report.

The next section is offered with this perspective in mind. The recommendations are not perfect answers. They are possible solutions, and new directions, each requiring consideration and development before possible trial.

RECOMMENDATIONS

The findings, observations, comments, and literature review outlined and described in the preceding sections of this report are all prelude for the recommendations.

The findings are indices or symptoms of underlying problems which are often difficult to perceive. Consequently, the recommendations do not necessarily follow a line-by-line correspondence to the findings. The recommendations are more holistic -- a synthesis of the dynamic factors which have been identified and analyzed in the preceding sections. To do anything else would constitute a "band-aid" approach -- a mere treatment of symptomatology.

BASIC EDUCATIONAL ASSUMPTIONS

Many different assumptions about fundamental educational beliefs and understandings are available for discussion and analysis. The possible solutions of this report are based upon only two basic assumptions.

THE PURPOSE OF TEACHING

A teacher's purpose is to enable a pupil(s) to become all that s/he may.

THE PRIMACY OF INSTRUCTION

The most important aspect of education is the enterprise between a teacher and a pupil(s) in the classroom. All others, and all other things can only exist to support that enterprise.

There are no separate assumptions for special education. The educational goals for every child in New Brunswick are exactly the same. The objectives and

methodology may vary, and some degree of that variance may be described as special, but the basic educational assumptions do not differ.

RECOMMENDATIONS

1. **Funding for special education need not and should not be separately provided. A funding formula can be developed that would, on the basis of weighting factors, provide for all the variance of educational needs encountered within and amongst jurisdictions.**
2. **Weighting factors should be derived from factors of educational needs and basic, easily accessible indices of context equity.**

The Amendment to the Schools Act and recently provided direction by the Department is based upon the virtues of integration or mainstreaming. Providing an adequate and appropriate education for a pupil with exceptional needs in a regular classroom provides any number of advantages and limitations. The teacher and all the pupils must make substantive changes to properly accommodate everyone. Integration means sharing -- a teacher couldn't function by designating something as special and something else as regular, and so much time as special and so much time as regular, and so on... Foolish in the extreme -- all the resources and policies come together in the classroom. The teachers and principals put it all together and they don't need built-in handicaps. All they need is a sufficiency of appropriate resources.

The Department can integrate its funding program. Global budgeting is not unknown at the district level. Accounting practices can be established to account for special education expenditures. Funds do not need to be allocated from separate accounts because such separation serves no educational purpose. The distinction is perceived as problematic and contrary to the educational philosophy of New Brunswick.

The exceptional needs of pupils vary: the educational needs of school districts vary: the organizational responses of each district should vary. The funding

formula should not dictate -- in any respect. Funds can be allocated to districts in an integrated, global fashion. Weighting factors allow for differences and proper accounting of expenditures should ensure that funds are being used in an appropriate manner.

INDIVIDUAL EDUCATIONAL PLANNING

Individualized Education Plans (I.E.P.s) as legislated in the United States and as practised in many areas of Canada are inappropriate. Amongst other faults, they tend not to be classroom based, neither in their derivation nor in their subsequent use.

I.E.P.s are fundamental to sound educational practice. In a variety of fashions, implicitly and explicitly, they have been basic to creating programs for exceptional needs since the beginning of special education. Given the advent of mainstreaming, they are even more relevant.

RECOMMENDATIONS

3. An Individualized Education Plan (I.E.P.) model, unique to New Brunswick, incorporating aspects of the conceptual model outlined in Appendix C, should be developed and implemented as soon as possible.
4. An I.E.P. should be provided for every pupil where exceptional needs result in program methodology and expectations which are significantly different than those of a pupil with ordinary needs.
5. An I.E.P. should be reviewed and revised as required, and at least once during each academic year.
6. I.E.P.s should be derived by the responsible teacher in consultation with the parents (the student as appropriate), the principal, and the resources of the School Support Team.
7. Each school should be assigned specialized resource staff to work as a School Resource Team in supporting teachers with their responsibilities of identifying and programming of pupils with exceptional needs. These persons may function on an itinerant basis, but their schedules should be

arranged to be able to meet as a team at the school with the teachers requiring assistance.

8. **Resource and Methods teachers should be assigned to schools as part of the Team. They should be available, at least half-time, to directly assist teachers with their responsibilities on a day-by-day basis.**

The implicit logic of using I.E.P.s is very appealing. Teachers will have a basic tool that reflects their own thinking; improves the quality of instruction; supports communication; and can be used by administrators to derive weighting factors for funding allocations. I.E.P.s are an excellent example of how administrative function can be derived from classroom function, and both functions can be mutually supportive of the other. By collecting I.E.P. data in the Spring, funding could subsequently be allocated according to current and anticipated needs, forestalling problems associated with historical derivations and retroactive grants.

Committee derivation of I.E.P.'s at the school level will do much to enhance the responsibility of the teacher and the principal. Specialized resources provided by the district and other community resources can be focused upon helping the teacher develop programs from better understandings of a pupil's needs.

Assessments based upon the requirement to make educational program decisions; analysis of the dynamics of program intervention; and a synthesis of all this information in terms of educational needs, will avoid any necessity to label or categorize children according to traditional, non-functional descriptors and result in better program-based decisions.

I.E.P.s are most important: they provide the basic keys to create programs for the teacher and the funding formulae for the administrator.

ADEQUACY AND EQUITY

Adequacy, as previously described, is essentially a judgment of sufficiency to meet established goals and objectives. Without goals and objectives, such judgments must revert to the caprice of political expediency and social judgment, or as James Kakalik (1978, p.18) suggests: "...adequacy is really a judgment of how much society is willing to pay."

In order to make these judgments, and in order to establish levels of program opportunity, some politically independent authority, representing parental and professional concerns, should be appointed to report its recommendations directly to the Deputy Minister.

In addition to this consideration, it must be realized that an inherent understanding of the educational philosophy currently expoused in New Brunswick, is the acceptance of the operational necessity to integrate program delivery -- in the classroom, in district organization, and in the Department of Education. Special education must be perceived as a variety of programming alternatives, available to all pupils as they experience exceptional needs. In other words, special education becomes normal; or, normal education becomes special. Therefore...

RECOMMENDATIONS

9. Consideration be given to combining Student Services and Curriculum within the Department of Education.
10. The Provincial Curriculum Advisory Committee should be assigned the responsibility to establish and annually review levels of program opportunities and resources according to all levels of programming requirements.
11. In order to undertake this responsibility, the Provincial Curriculum Advisory Committee should be directed to appoint a sub-committee, representing credible professional and parental interests, to provide

program recommendations based upon study of district plans and accountability reports.

These are key recommendations. Teachers will create I.E.P.s; principals will organize school resources to enable teachers to address learning needs; districts will be provided with funding sufficient to meet their specified needs; and the Department will have a "need base" to create a funding formula. All this can be done, if the Minister defines the levels of program in terms of educational needs and resource requirements.

In practice, teachers will match learning needs to appropriate levels of program. And at the other end of the spectrum, the Department will use the levels of program to create weighting factors for the funding formula. In between, all others can create their organizational plans based upon known factors of educational need and funding resources.

Planning will become important. Funding will be proactive -- not reactive. It will be based upon plans and expectations -- not history.

Educational accountability will become important. The annual review of each I.E.P. in terms of results will provide data for the Advisory Committee to consider adjustments to program levels in a legitimate and credible forum. Any shortfalls relative to meeting the program objectives of I.E.P.s can be adjusted by differential allocations to resource levels.

RECOMMENDATIONS

- 12. The funding formula should be a resource-based model. See Appendices D, E, & F.**

The rationale is straightforward: pupils have **needs** which dictate **programs** which require **resources**. Funding provides resource requirements; therefore, grants should be tied as closely as possible to the resource requirements.

Staffing models and other expenditure ratios should be only considered as operational guidelines for district consideration -- and not as absolute governance of resource use.

The design or selection of a funding formula should be based upon consideration of the following principles. See Appendix D - PRINCIPLES OF GOOD FUNDING FORMULAE for more detail.

- comprehensiveness
- flexibility
- accountability
- equity
- currency
- simplicity

There are many types of special education funding formulae currently being used. They can be categorized into three major classifications. See Appendix E - TYPES OF SPECIAL EDUCATION FORMULAE for more detail.

- Resource Based Formulae - based upon the payment for resources (teachers, aides, equipment, etc.) with guidelines on the cost of resources that are allowed and on the resource used per student served.
- Child-Based Formulae - based upon the number and type of children serviced with guidelines on the cost and use of resources.
- Cost-Based Formulae - based on cost with guidelines on the children served and the use of resources.

No one formula is a perfect answer: each involves compromises among important, but possibly conflicting belief, programmatic, and management issues. In evaluating a given funding formulae for special education or in developing an alternative formula, the educational policy maker will need to consider "trade-offs" among the various criteria or principles of formulae. In addition, the choice of a formula becomes important for the incentives and disincentives it may

create for school districts in providing adequate and appropriate programs and services. A summary of such incentives and disincentives, according to basic type of funding formula, has been described in Appendix F - SUMMARY OF INCENTIVES AND DISINCENTIVES OF FUNDING FORMULAE.

Past experience should enable the Department to establish a generic unit of funding based upon known resource requirements to maintain a pupil with ordinary needs in a regular classroom. Weighting factors, based upon resources required to deal with factors of exceptional need, can be used to adjust the allocation according to established program needs... and not estimates of prevalence. Other weighting factors, based upon dimensions of context equity, can be used to further adjust the allocations according to local conditions or program expectations.

The total amount available for distribution would be initially subject to political, social judgment, but at least its allocation would be equitable, and a basic rationale of need would be available for examination. Subsequent evaluation of resource use relative to the program objectives of I.E.P.s would enable policy-makers to make better judgments of adequacy and equity.

CLASSROOM LOADING FACTORS

Much concern has been expressed about the additional responsibilities facing teachers who are attempting to integrate pupils with exceptional needs. The New Brunswick Teachers' Association is firm in its support of mainstreaming, providing the teacher...

- participates in the planning prior to placement;
- receives direct support in the classroom from support personnel; and
- is not over-burdened in numbers nor in coping with the extraordinary requirements of a pupil with severe needs.

The Association has many other recommendations worthy of consideration and implementation, but these three related directly to the findings and recommendations of this study.

The first concern will be removed if the I.E.P. recommendations of this report are followed. However, it will be unfortunate if direct classroom support is solely interpreted to mean a teacher's aide/attendant. It is unrealistic to assume that the only way to integrate pupils is to provide aides or attendants. Severity of need, class size, instructional competence, and confidence are more significant factors. Teacher training, and the direct assistance of a Resource and Methods teacher will do more for a teacher's competence and confidence than a teacher's aide.

Some aides are needed for personal care and all aides can provide educational support. They can listen to a child read, correct daily work, provide sensory stimulation, and conduct other program activities as directed by a teacher, physio-occupational therapist, or speech pathologist. Only in rare cases should an attendant be assigned to one specific pupil. Most aides should be assigned to the school, to be allocated to teachers by the principal according to the dictates of I.E.P.s.

RECOMMENDATIONS

13. **Weighting factors derived from I.E.P.s should be considered as class loading factors in determining a school's organization.**

Severity of need and class size are very important factors in providing opportunities for success. Class loading factors can deal directly with both these issues. For example, suppose a pupil with extreme behavioural problems was assigned a weighting factor of five. Its application to class loading could mean that placement in a teacher's class would count as five pupils. Such use would prevent over-loading, and in combination with the other supports specified in the

I.E.P., the teacher's opportunity to deal directly with that student would be enhanced.

USE OF SHARED RESOURCES

There are many cases of mild and moderate needs which have been successfully integrated. It is those with extreme needs who are creating major problems. One case, reported to the consultant, is taking hours of the principal's time and the attention of several supervisors and superintendents because the community and the Department of Health and Social Services have not provided appropriate resources. (The teacher is a real hero, but the class is losing). And this case is not unique. Every district has reported similar problems.

Given the current mandate of Health and Social Services, there is little likelihood that school districts will be able to employ specialized staff. That is unfortunate because there are few instances where cross-deployment works successfully. When it does, it appears to be dependent upon some very committed individuals and the drive of local leadership.

RECOMMENDATIONS

14. **Local Coordinating Committees** comprised of senior administrative officials from community agencies, the school district, and the Department of Health and Social Services should be established to coordinate service delivery and planning, and to respond to emergent problems.

Local or regional (if they're small) committees of this nature work well providing:

- the members have the authority to make decisions;
- the members are mutually committed to making the committee work; and
- individual members accept the responsibility of solving emergent problems when they occur.

If such a committee were active in the district with the previously described problem, their current difficulties might not exist. The group home taking this boy would not accept the case until the resources were available. In fact, in all probability, the group home may not have been established until the resources were present.

ACCOUNTABILITY

It can be said that:

- authority without responsibility is tyranny;
- responsibility without authority is impotence; and
- responsibility without accountability is anarchy.

Accountability is the key in the trade-off between responsibility and authority.

Good management is many things, but most certainly, it is based upon a trust and expectation that those above and below on the organizational ladder are all competent and committed to the mutual enterprise. To expect anything else, should result in the removal of responsibility and reduce the need for accountability.

Modern management, such as "management for results," moves the responsibility and authority for operational decision-making to the front-lines. Resources are provided to enable the front-line managers to do the job, who are then accountable for results.

The School Act states:

- 33(4) The principal of the school shall have responsibility for the administration and supervision of all school programs, including instruction...

Consequently, it would appear that in any school district in New Brunswick, the principal has the major, supervisory, front-line role. Therefore...

RECOMMENDATIONS

15. **The role of the principal should be emphasized as an educational leader and not merely as the manager and administrator of a building.**
16. **Sufficient resources and authority should be assigned to the principal to enable her/him to accept the responsibilities of staff leadership and program improvement.**
17. **The principal, the district, and the Department should establish procedures of educational accountability in terms of result attainment.**

The role of the principal is key to understanding the dynamics of educational change. The principal is firstly an educator, and secondly an administrator and manager. And yet, too often, the secondary functions supplant the primary function.

Principals may suggest that the need for accountability may be the major cause for the problem. It might be also offered that possibly the principals are accounting for the wrong things in the wrong ways. Administrative accounting procedures need not be intrusive, and if it is really important, then maybe properly trained clerical staff should be employed for such purposes. It is more important for principals to be leading staff development and program improvement.

The recent issues about special education are an excellent example. The principal should not be busy checking purchase orders. The principal should be busy helping teachers to develop and implement I.E.P.s. After all, according to the Act, the principal is ultimately responsible. Accountability should feature the educational consequences of this responsibility -- not the accounting of the means to support this responsibility.

The best accountability comes from the bottom up. Instead of bureaucratic means to obtain data for purposes of operational accountability, the problem should be reversed. It should be the responsibility of the principals to demonstrate their results. Similar practice in other areas of endeavour has produced amazingly creative and novel accountings. Besides, good performers enjoy the opportunity to show-off.

A system should not be governed according to its weakest member. Rules, procedures, and accountabilities designed for the weak, frustrate the better performers and reduce the entire organization to a lower level of performance.

Any accountability designed to "control" is counter-productive. If a manager feels the need to "control," responsibility has been effectively removed from the other and reverts to the "controller."

A measure of an effective educational bureaucracy would be one in which no form or report would be completed unless it supported an educational decision or the employment of staff.

CONCLUSION

The recent initiatives by the Department of Education constitute a major step forward. A new sense of awareness and promise has been created. The recommendations have been designed to fulfill that promise.

However, the recommendations are not a complete plan-of-action. They establish direction and opportunities for change. Each recommendation requires further development, and for the most part, must be considered as only a single component of an integrated entity. A piece-meal, broken-front implementation likely would not be effective.

The findings are not merely reflective of funding problems; they illustrate the need for a proper and wholesome provision of education. There is no one simple answer. Careful, well-developed implementation of all the recommendations will result in the kind of education anticipated by the recent changes of legislation and policy.

IMPLEMENTATION CONSIDERATIONS

Development and implementation takes time; therefore, consideration should be provided to continuing the level of funding to each district for one more year, such that:

- no district needs to reduce its current level of service; and
- the extra funds provided to any district in 1987-88 be continued until the new funding formula can be introduced.

Development steps to be considered should be scheduled as follows:

- | | | |
|-----------|---|--|
| 1988, Feb | - | Establish an I.E.P. model. Create guidelines and directions for use. Develop an in-service plan. |
|-----------|---|--|

- Establish guidelines for using a School Team. Develop role-descriptions for all members with specific reference to the referring teacher, principal, and the Resource and Methods teacher. Develop an in-service plan.
- 1988, Mar - In conjunction with the Department of Health and Social Services, establish guidelines for local coordinating committees. Develop specific role descriptions for use of all specialized staff in the school context -- based upon educational needs. Ensure the inclusion of planning and resource provision responsive to I.E.P. needs. Develop an in-service plan.
- 1988, Mar - Request the Provincial Curriculum Advisory Committee to establish basic levels of program opportunity, according to general program expectations and resource requirements. Create a mechanism for matching I.E.P. needs to program levels as recommended by the Committee. Develop an in-service plan.
- 1988, Apr - Initiate the creation of a trial resource-based funding formula. Identify a simple means to access context equity data. Establish trial weighting factors using program level recommendations and context equity data. Develop a trail-run evaluation plan using forthcoming 1988-89 data from the districts.
- 1988, Oct - Establish an initial school-based accountability model and procedures using the advice of a committee of representative principals and superintendents. Develop an in-service plan.

The entire development activity should be planned and coordinated by a small committee consisting of: an assistant deputy minister, two superintendents representing large and small districts, a representative of the N.B.T.A., and an independent resource person -- knowledgeable of all aspects of the proposed development.

Full implementation could be considered effective as early as the 1989-90 academic year following the proposed in-service and evaluation activities which should be conducted during 1988-89.

Implementation of these recommendations will result in additional promises: better programming, successful mainstreaming, and effectual funding. Use of a resource-based funding formula could result in a relatively simple extension to the creation of a Resource Cost Model (RCM). A RCM is a recipe for taking the guesswork out of school finance and represents an important breakthrough in the management, allocation, and utilization of educational resources. As the magnitude of resources devoted to the needs of pupils with exceptional needs increases, so will the need and demand for improved information concerning the cost of such programs and services. By making explicit the programmatic aspects of special education and linking these with their associated cost and educational goals, the RCM approach can become an important decision support system in planning for the provision of appropriate, adequate, and equitable special education programs.

And that is what this report has been about. The problems experienced by District #20, which initiated the study, were legitimate concerns of a district in transition. District #20 has a well-developed history of sound educational practice. It is adapting to the new mandate, but it does require resources sufficient to meet its goals. The Department of Education has recognized that the problems of District #20 are symptoms of change and portents of what may eventually occur throughout the province. Effective implementation of the recommendations of this report will not only forestall this eventuality, it will provide the means for every child to have an appropriate education in as normal an environment as possible.

The leadership of the Department, in introducing the legislative and policy changes of the past few years, has provided opportunities to create the kind and quality of education that will establish New Brunswick to be in the forefront of "third wave" actuality. The challenge is vested with those who share the vision.

APPENDICES

A SUMMARY OF FINDINGS

A SUMMARY OF RECOMMENDATIONS

A CONCEPTUAL FORMAT FOR AN INDIVIDUAL EDUCATION PLAN

PRINCIPLES OF GOOD FUNDING FORMULAE

TYPES OF SPECIAL EDUCATION FORMULAE

SUMMARY OF INCENTIVES AND DISINCENTIVES OF SPECIAL
EDUCATION FUNDING FORMULA

APPENDIX A

A SUMMARY OF FINDINGS

*Page
Reference*

6

1. Mainstreaming special education, legislating a "zero-rejection" policy, repealing the Auxiliary Classes Act, and closing specialized treatment facilities such as the W.F. Roberts Hospital School will result in more than changes of educational practice. Educational costs will likely increase, if the qualities of education possible in segregated placements, are to be maintained.

6

2. While overall, provincial funding allocations were increased, there was no initial attempt to provide differential allocations to school districts to allow for a disproportionate prevalence of educational needs.

6

3. Most districts received more funds (staff allocations) for the 1987-88 academic year than for previous years. District #20 initially received fewer staff allocations, but coincident with approving this study, the Department subsequently provided District #20 with an additional \$200,000 (approximately) as an adjustment factor. Due to higher costs, District #19 has also received an additional \$100,000 (approximately) and Districts #10 & 15 have received \$25,000 (approximately).

8

4. While possibly available, no school district, other than District #20, provided or made reference to program goals or Individual Education Plans (I.E.P.s), or any derivative of same, to the consultant during discussions of adequacy of funding. Programs tended to be described in terms of placement or according to traditional categorical labels.

APPENDIX A continued...

- 8 5. All districts and particularly District #20 reported problems with teacher aides and personal attendants. There were not enough and either union or New Brunswick Teachers' Federation policies limited their potential use in classrooms.
- 8 6. All districts reported serious historical and current service shortages in terms of psychiatric, speech pathology, physiotherapy, and occupational therapy. Of the few cases receiving support, only annual assessment reviews were provided.
- 11 7. A recent philosophy statement and staffing model, provided by the Department of Education in January, 1987, outlines nine possible levels of educational opportunities. However, description of each level is limited to placement. It does not include program expectations, nature of program, and resource requirements. In addition to these program equity omissions, the consultant was not apprised of any consideration or use of context equity in the Department's funding formula.
- 12 8. Funding of special education programs and services is equally distributed throughout the province, proportionate to district enrolments. The amounts of funding follow provincially recommended staffing models.
- 15 9. District school administrators believe that provincial funding was based upon an equally distributed five percent prevalence factor. District #15 reported a disproportionately high prevalence of severe behavioural needs due to a large number of group homes recently developed within the district. District #20 has reported, in a variety of documents over the past few years, a disproportionately higher prevalence of severe retardation, severe physical and health handicaps, severe learning disabilities, multi-handicapped and severe behavioural and social problems.

APPENDIX A continued...

- 15 10. In spite of recent changes of Departmental philosophy, all observed records and reports by school districts, identified and described children in terms of traditional categories of need.
- 18 11. All districts, except District #20, are pleased with the new funding formula. District #20 agrees with and is supportive of the concept of the new funding formula; its only concern is that of adequacy. No district wishes to revert to the former "cap-in-hand" approach and the patronizing manner in which funds were previously allocated.
- 18 12. The current funding formula is ostensibly a flat-grant which is overly generalized and is not necessarily related to actual expenditures and requirements at the local level.
- 18 13. School districts find it difficult to provide data on the cost of special education programs since accounting procedures tend to provide line-item costs rather than programmatic costs.
- 19 14. All four Boards submitted annual budgets. However, only District #20 provided a copy of its five year plan to the consultant.
- 20 15. Without I.E.P.s noting objectives, there can be no accountability in special education.
- 21 16. School districts are no longer required to submit lists of all pupils with exceptional needs. However, many districts have continued to prepare and submit similar lists which include description of the pupils' educational needs in traditional terms.
- 21 17. School districts are required to submit lists of all persons by name, function, and annual salary, who are employed to supervise, to teach, or to attend to the exceptional needs of pupils.

APPENDIX B

A SUMMARY OF RECOMMENDATIONS

*Page
Reference*

- | | |
|----|--|
| 24 | 1. Funding for special education need not and should not be separately provided. A funding formula can be developed that would, on the basis of weighting factors, provide for all the variance of educational needs encountered within and amongst jurisdictions. |
| 24 | 2. Weighting factors should be derived from factors of educational needs and basic, easily accessible indices of context equity. |
| 25 | 3. An I.E.P. model, unique to New Brunswick, incorporating aspects of the conceptual model outlined in Appendix C, should be developed and implemented as soon as possible. |
| 25 | 4. An I.E.P. should be provided for every pupil where exceptional needs result in program methodology and expectations which are significantly different than those of a pupil with ordinary needs. |
| 25 | 5. An I.E.P. should be reviewed and revised as required, and at least once during each academic year. |
| 25 | 6. I.E.P.s should be derived by the responsible teacher in consultation with the parents (the student as appropriate), the principal, and the resources of the School Support Team. |
| 25 | 7. Each school should be assigned specialized resource staff to work as a School Resource Team in supporting teachers with their responsibilities of identifying and programming of pupils with exceptional needs. These persons may function on an itinerant basis, but their schedules should be arranged to be able to meet as a team at the school with the teachers requiring assistance. |

APPENDIX B continued...

- 25 8. Resource and Methods teachers should be assigned to schools as part of the Team. They should be available, at least half-time, to directly assist teachers with their responsibilities on a day-by-day basis.
- 27 9. Consideration be given to combining Student Services and Curriculum within the Department of Education.
- 27 10. The Provincial Curriculum Advisory Committee should be assigned the responsibility to establish and annually review levels of program opportunities and resources according to all levels of programming requirements.
- 27 11. In order to undertake this responsibility, the Provincial Curriculum Advisory Committee should be directed to appoint a sub-committee, representing credible professional and parental interests, to provide program recommendations based upon study of district plans and accountability reports.
- 28 12. The funding formula should be a resource-based model. See Appendices D, E, & F.
- 31 13. Weighting factors derived from I.E.P.s should be considered as class loading factors in determining a school's organization.
- 32 14. Local Coordinating Committees comprised of senior administrative officials from community agencies, the school district, and the Department of Health and Social Services should be established to coordinate service delivery and planning, and to respond to emergent problems.
- 33 15. The role of the principal should be emphasized as an educational leader and not merely as the manager and administrator of a building.
- 33 16. Sufficient resources and authority should be assigned to the principal to enable her/him to accept the responsibilities of staff leadership and program improvement.

33

17. The principal, the district, and the Department should establish procedures of educational accountability in terms of result attainment.

A CONCEPTUAL FORMAT FOR AN INDIVIDUAL EDUCATION PLAN

PART ONE - STATEMENTS OF EDUCATIONAL NEEDS AND PROGRAMMING RECOMMENDATIONS

1. *This part consists of up to five statements, summarizing needs derived from separate documentation of programming interventions and diagnostic assessments.*
2. *The record of program interventions is most important. Assessment information should at least include: an educational assessment, a physical/medical/health assessment, a psychological assessment, and a school report detailing attendance history, parental consultations, and descriptions of how other assessments have been incorporated into programming interventions.*
3. *Each need statement should be accompanied with one or more programming recommendations.*

PART TWO - ADMINISTRATIVE ACTIONS

1. *This part should detail the school, class placement, and the name of the teacher responsible for the program plan.*
2. *All resource requirements should be listed and described.*
3. *Provision should be included for evidence of parental consultation in respect to the I.E.P. and the signature of the school official who has conducted the consultation.*

PART THREE - THE INDIVIDUAL PROGRAM PLAN (I.P.P.)

1. *This part is derived by the teacher responsible for the program after the child has been assigned.*
2. *The other two parts of the I.E.P. become part of the official cumulative file. This part belongs to the teacher and is likely part of the regular planning or day-book.*
3. *The I.P.P. is the teacher's translation of the needs statements into active day-to-day planning. The I.P.P. should detail program objectives, performance expectations, and include a record of program evaluation.*
4. *All subsequent reports and any other further I.E.P.s will be based largely upon the I.P.P.*

APPENDIX D

PRINCIPLES OF GOOD FUNDING FORMULAE

COMPREHENSIVENESS • accommodation of all exceptional learning needs • provision for all expenses including supervision, administration, and ancillary services
EQUITY • sufficient to provide at least a basic level of support • proportionate to differences of context, i.e., size, wealth, and geographic considerations
FLEXIBILITY • provision for jurisdictional differences of need • adaptive to jurisdictional differences of policy and practice (program and service delivery)
CURRENCY • accommodation of enrolment changes and price inflation • adjustable to cost differences of implementation <i>versus</i> maintenance of established programs and services
ACCOUNTABILITY • demonstration of expenditures according to designated need • procedures for outcome evaluation
SIMPLICITY • compatible with funding formulae for general education • administrative ease and avoidance of bureaucratic complexity

TYPES OF SPECIAL EDUCATION FORMULAE

RESOURCE-BASED FORMULAE - based upon the payment for resources (teachers, aides, equipment, etc.) with guidelines on the cost of resources that are allowed and on the resource used per student served.

- **Unit:** A school district is reimbursed a fixed amount by the provincial government for each unit of classroom instruction, administration, and transportation. The teacher-pupil ratio for each is recommended for various kinds of exceptional conditions.
- **Personnel:** A school district is reimbursed by a fixed grant for each additional approved specialist or non-specialist employed to service students with special needs.

CHILD-BASED FORMULAE - based upon the number and type of children serviced with guidelines on the cost and use of resources.

- **Weight:** The amount of reimbursement for a non-exceptional pupil is used as the base figure, and the local district is reimbursed by a multiple of this base, depending on the type of exceptional need.
- **Categorical:** The school district is reimbursed by a fixed amount of grant for each exceptional pupil, depending on the type of exceptionality.

COST-BASED FORMULAE - based upon cost with guidelines on the children served and use of resources.

- **Percentage:** A set of approved costs is established for special education. The local district and the provincial department share these costs on a percentage basis, with the latter generally assuming major responsibility.
- **Excess Cost:** The cost of educating an exceptional pupil is calculated and compared to the average cost of educating a non-exceptional pupil in the school district. The difference is either partially or fully reimbursed by the provincial department.
- **Flat Grant (Block-Funding):** The school district is provided a fixed grant for every resident pupil to be used exclusively for special education purposes.

SUMMARY OF INCENTIVES AND DISINCENTIVES OF SPECIAL EDUCATION FUNDING FORMULAE

PROGRAM AND MANAGEMENT ISSUES	TYPE OF FUNDING FORMULA		
	RESOURCE BASED	CHILD BASED	COST BASED
Record keeping and reporting requirements	Little information needed beyond normal pupil, personnel, and cost records and reports	Need accurate data on number of children, may require great deal to obtain time spent in different programs	Require detailed cost records, submissions, and approval of expenditure of reports, and greatest involvement and control by funding agency
Program and fiscal planning	Most fitted to planning sequence; based on student needs with funding an automatic calculation	Less direct process; tends to be based on available dollars, not educational needs	Fits planning sequence, but available dollars are an early planning factor
Control of costs	Done through regulation	Done through regulation	Percentage formula may help hold down costs through requiring district share
Obtaining state and federal priorities	Higher funding levels for certain program units or personnel can encourage these programs	Differential funding amounts can encourage service to certain students	Priority on higher funding for certain items/programs can encourage these programs
Tracking special education funds	Simple to track funding to expenditures	Not as possible to trace individual child funding and expenditures, must be done on an aggregate basis	Most direct connections between funding and expenditures
Incorporation of future changes	Updating of funding amounts is straightforward, changes apparent	Updating of funding amounts is more difficult to explain; may become arbitrary	Updating of funding amounts tied to cost changes

TABLE OF REFERENCES

NEW BRUNSWICK SOURCES:

Department of Education

- *Education: Integration as a Provincial Policy*, a paper presented by the Deputy Minister at the National Conference of Canadian Association for Community Living, Halifax, 1987.
- *Integration Means All Our Children Belong*, information published by the Student Services Branch, Department of Education, 1987.
- *New Brunswick Regulation 84-51 (Schools Act O.C. 84-188)*, 1984.
- *An Act to Amend The Schools Act (Bill 85)*, proclaimed 1987.
- *Philosophy Statement and Staffing Models for Provision of Special Services*, Department of Education, 1987.
- *CHAPTER S-5, SCHOOLS ACT*, 1978 (repealed).
- *CHAPTER E-1.2, Education of Aurally or Visually Handicapped Persons Act*, 1975.
- *REGULATION 84-36, AUXILIARY CLASSES ACT (O.C. 84-159)*, 1984 (repealed).
- *CHAPTER A-19, AUXILIARY CLASSES ACT*, 1982 (repealed).
- *Final Report: A Study of the Auxiliary Classes Act*, 1983.
- *Notes regarding budgeting (a history)*, Assistant Deputy Minister, 1987.
- *Student Services Directory*, Department of Education, 1986-87.
- *School Directory*, Department of Education, 1987-88.

School District #19

- *Integration*, pamphlet published by the Student Services Department, 1987.
- *Transitional Learning Centre*, pamphlet published by Student Services Department, 1987.

School District #20

- *District Program/Service Funding, 1976-1987.*
- *Correspondence regarding support services (staffing), 1987.*
- *Special Services Five Year Plan, 1987.*
- *Consultants Report Regarding the Closure of W.F. R. Hospital School and Response from School Trustees, 1987.*
- *Newspaper Clippings re: Closing of W.F.R. Hospital, School and Integration, 1987.*
- *Newspaper Clipping: Funding and Staffing, 1987.*
- *Executive Summary: Intervention Programs for Elementary and Junior High Schools, 1987.*
- *Report Re: Support Personnel, prepared by a Departmental Observation Team, 1986.*
- *Special Education Minutes, 1971-87.*
- *Student Profiles: Exceptional Pupils, 1986.*

New Brunswick Teacher's Association

- *Integration of Exceptional Pupils, a submission to the Minister of Education, 1987.*
- *Survey on Integration, conducted 1987.*

BIBLIOGRAPHIC SOURCES:

Anderson, B.D., and J. R. Fleming. *Linking School Finance to Educational Management: A Report on British Columbia's School Finance Reform*, Paper presented at the Annual Meeting of the American Educational Finance Association, Orlando, Fla.: March, 1984, p. 13.

Atherton, P.J. *Critical Issues in Education Finance in Ontario*, Contract research for the Commission on the Financing of Elementary and Secondary Education in Ontario: Ministry of Education, Toronto, Ontario, February, 1985, p. 21.

- Atherton, P.J. and H. Armstrong. *A Proposal for Public Price Indexes*. Ottawa: Canadian School Trustees Association, November 25, 1975, Mimeograph, Appendix E.
- Balow, B. Definitional and prevalence problems in behaviour disorders of children, *School Psychology Digest*, Vol. 8, No. 4, 1979, p. 216.
- Berke, J.S. The current crisis in school finance: Adequacy and equity, *Phi Delta Kappan*, Vol. 53, No. 1, 1971, p. 04.
- Bernstein, C.D., W.T. Hartman, and R.S. Marshall. Major policy issues in financing special education, *The Journal of Education Finance*, Vol. 1, Winter, 1976, pp. 72-75.
- Bernstein, C.D., M. Kirst, W.T. Hartman, and R.S. Marshall. *Financing Educational Services for the Handicapped: An Analysis of Current Research and Practices*. Palo Alto, CA: Management Analysis Centre Inc., December, 1974, p. 19.
- Brackett, J., J. Chambers, and T. Parrish. *The Legacy of Rational Budgeting Models in Education and a Proposal for the Future*. Institute for Research on Educational Finance and Governance School of Education, Stanford University: Stanford, Ca., August, 1983, p. 04, 41.
- Braun, C. Teacher expectations: sociopsychological dynamics, *American Educational Research Journal*, Vol. 46, 1976, p. 62.
- Brown, W.J. *Education Finance in Canada*. Ottawa: Canadian Teachers' Federation, 1981, p. 346.
- . "The Education Toll of the 'Great Recession', " *The Cost of Controlling the Costs of Education in Canada*. Department of Educational Administration, Toronto: The Ontario Institute for Studies in Education, August, 1983, p. 01.
- Caldwell, B.J. "Resource Allocation at the School Level: An Examination of School-Based Budgeting in Canada and the United States." Presented at the National Conference on Educational Administration of the Australian Council for Educational Administration, Adelaide, South Australia, 1980, p. 01.
- Chambers, J.G. The development of a cost of education index: Some empirical estimates and policy issues, *Journal of Educational Finance*, Vol. 5, Winter 1980, pp. 118-123.
- Chambers, J.G., and T.B. Parrish. "Adequacy and Equity in State School Finance and Planning: A Resource Cost Model." Institute for Research on Educational Finance and Governance, Stanford University: Stanford, CA: March, 1983, p. 72.

- Chambers, J.G. and T.B. Parrish. *The Issue of Adequacy in the Financing of Public Education: How Much Is Enough?* Stanford University: Stanford, CA: Institute for Research on Educational Finance and Governance, 1982, p. 01.
- Chambers, J.G. and W.T. Hartman. *A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education.* Stanford University: Stanford, CA: Institute for Research on Educational Finance and Governance, 1981, pp. 16-23.
- Craig, P.A. Counting handicapped children: A federal imperative, *Journal of Education Finance*, Vol. 1, Winter, 1976, p. 14.
- Craig, P.A. and N.B. McEchron. *The Development and Analysis of Baseline Data for the Estimation of Incidence in the Handicapped School Population.* Palo Alto, CA: Stanford Research Institute, 1975, p. 07.
- Fleischmann, M., et al. *Report of the New York State Commission on the Quality, Costs, and Financing of Elementary and Secondary Education.* Vol. 2, New York, 1972, p. 112.
- Froomkin, J. *Estimates in Projections of Special Target Group Populations Elementary and Secondary Schools.* Report gathered for the President's Commission on School Finance, Washington, DC, 1972, p. 124.
- Guthrie, J.W. Funding an 'adequate' education, *Phi Delta Kappan*, Vol. 67, No. 7, 1983, p. 417.
- Handicapped Children's Project, Financing Education Programs for Handicapped Children.* Conference Notebook for Regional HACHE Conferences, Educational Commission of the States, 1973, p. 62.
- Harmon, G. "Policy Making and the Policy Process in Education," in R. Farquhar and I. Housego (eds.), *Canadian and Comparative Educational Administration.* Vancouver, BC: Centre for Continuing Education, University of British Columbia, 1980, p. 78.
- Harrold, R.I. The development of elementary and secondary education price indexes in Canada and Australia, *Interchange*, Vol. 12, No. 4, Toronto: The Ontario Institute for Studies in Education, 1982, p. 93.
- Hartman, P.L. and W.T. Hartman. *Local Special Education Planning Model: User's Manual.* Stanford University: Stanford, CA: Institute for Research on Educational Finance and Governance, 1982, pp. 43-49.
- _____. *Projecting Special Education Costs.* Stanford University: Stanford, CA: Institute for Research on Educational Finance and Governance, 1981, p. 18.

- Hartman, W.T. and T.R. Haber. *School Finance Reform and Special Education*. Stanford University: Stanford, CA: Institute for Research on Educational Finance and Governance, 1981, p. 09.
- Hartman, W.T. Estimating the cost of educating handicapped children: A resource-cost model approach - summary report, *Educational Evaluation and Policy Analysis*, Vol. 3, No. 4, 1981, p. 34
- . *Policy Effects of Special Education Funding Formula*. Stanford University: Stanford, CA: Institute for Research on Educational Finance and Governance, 1980, p. 84.
- Henderson, R.A. Financing special education for exceptional pupils, in N.E. Cain (ed.), *Financing Education Programs for Handicapped Children*, Denver: Education Commission of the States, 1974, p. 52.
- Johns, R.L. and A. Kern. *Alternative Programs for the Financing of Education*. National Education Finance Project, Vol. 5, 1971, Chapters 9 and 10, pp. 112-115.
- Johns, R.L. and E.L. Morphet. *Planning School Finance Programs: A Study Guide*. Washington, DC: United States Office of Education (DHEW), 1972, pp. 02-03, 59.
- Jones, P.R. and W.R. Wilkerson. *Special Education Program Cost Analysis*. Bloomington, IN: Department of School Administration, Indiana University, 1972, p. 63.
- Kakalik, J.S. *Issues in the Cost and Finance of Special Education*. Santa Monica, CA: Rand Corporation, 1978, p. 02.
- Kelly, B. *The Funding and Cost of Special Education*, a report prepared for the Council of Ministers of Education, Canada: Toronto, Ontario, January 1985, pp. 19-21.
- Lawton, S.B., R. Bilyk, and T. Tzalalis. *Creation of Regional Educational Costs Indexes for Ontario*. Contract research for the Ministry of Education, Ontario: Ministry of Education, Toronto, ON: August, 1984, pp. 24-27.
- Lawton, S.B. Ontario's approach: Paying school boards to save, *The Cost of Controlling the Costs of Education in Canada*. Department of Educational Administration, Toronto, ON: The Ontario Institute for Studies in Education
- . "Economics and Financing of Education." Paper presented to the Canadian Association for the Study of Educational Administration (CASEA) at the Annual Conference of the Canadian Society for the Study of Education (CSSE), Ottawa, June 1982, p. 14.

- Lederer, J.B. *Resource Allocation and Evaluation Model for Providing Services to the Multiply Handicapped in the Bergen County Special Services School District*. Paramus, NJ: Bergen County Special Services School District, 1981, p. 03.
- McLure, W.P., R.A. Burnham, and R.A. Henderson. *Special Education Needs - Costs - Methods of Financing*. Champaign, IL: Bureau of Education Research, College of Education, University of Illinois, 1975, pp. 48-53.
- Norton, D.P. and P.A. Sommers. *The Development of a Cost Efficiency Model to Assist in Special Education Program Decision-Making and Financing*. Wausau, WI: Wausau District Public Schools, 1975, p. 72.
- Parrish, T.B. and J.G. Chambers. *An Overview of the Resource Cost Model (RCM)*. Stanford, CA: Associates for Education Finance and Planning, Inc., 1984, p. 01.
- Parrish, T.B. and J.G. Chambers. "Deriving Appropriate Educational Program Costs in Illinois." Paper presented at the fourth Annual Research Conference of the Association for Public Policy Analysis and Management, Minneapolis, MN, 1982, p. 12.
- Position Paper: Special Education Funding*. Edmonton: Conference of Alberta School Superintendents, May 1984, p. 03.
- Posno, T.R. *A Resource Cost Model As a Decision Support System for Planning Special Education*, an unpublished doctoral thesis, Ontario Institute for Studies in Education, Toronto, ON: 1986.
- Rawlyk, S.A. Some fundamental issues in funding special education, *Education Canada*, Vol. 17, No. 1, Toronto, ON: Canadian Education Association, 1977, pp. 46-47.
- Reynolds, M.C. and W. Birch. *Teaching Exceptional Children in All America's Schools*. Council for Exceptional Children, Reston, VA: 1982 & 1977, p. 44.
- _____. Finance: Without which there is no special education, *Exceptional Children*, Vol. 39, 1973, p. 463.
- Vescera, L., S. Fuhrman, and J. Collins. *Special Education Finance: The Interaction Between State and Federal Support Systems*. Denver, CO: Education Finance Centre, Education Commission of the States, 1979, p. 61.
- Wilken, W.H. and D.O. Porter. *State Aid for Special Education: Who Benefits?* Washington, DC: The National Foundation for Improvement of Education, 1976, p. 19.